

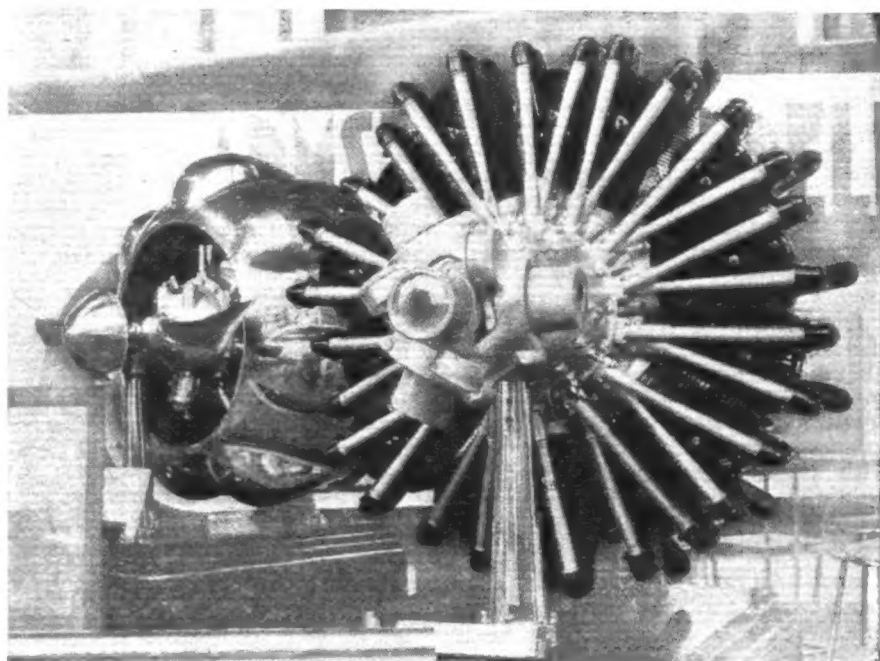
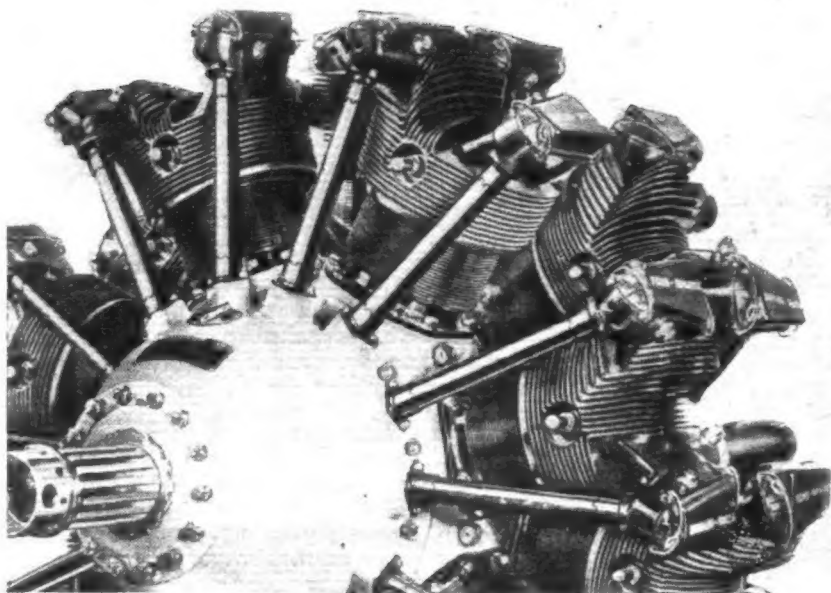
POWER at the SALON

A Detailed Review of the British and Continental Engines at the Show : A Remarkable Variety of Types

AS indicated in our brief review last week, the variety of engine types displayed at the Paris Salon, and their range of power, are greater than at any previous show. A notable feature is the fact that the majority of firms are interesting themselves in a wide variety of types rather than specialising in one particular arrangement of cylinders. It is unfortunate that more British engine and aircraft firms are unable to take part, and the absence of German and Italian manufacturers, who can usually be depended upon to introduce several departures, is noticeable; however, it would appear that the French firms are seeking to obviate any impression of this absence by their own multifarious displays.

It does not appear that any one engine class is in the majority, but it is apparent that an advance has been, and is being, made with high-powered radial engines. Gnome Rhône have added to their range a two-row 18-cylinder radial, known as the 18.L., which gives 1,400 h.p. for take-off and 1,300 h.p. at 11,000ft. at 2,150 r.p.m.; the diameter is 4.59ft., and the weight 1,587 lb.

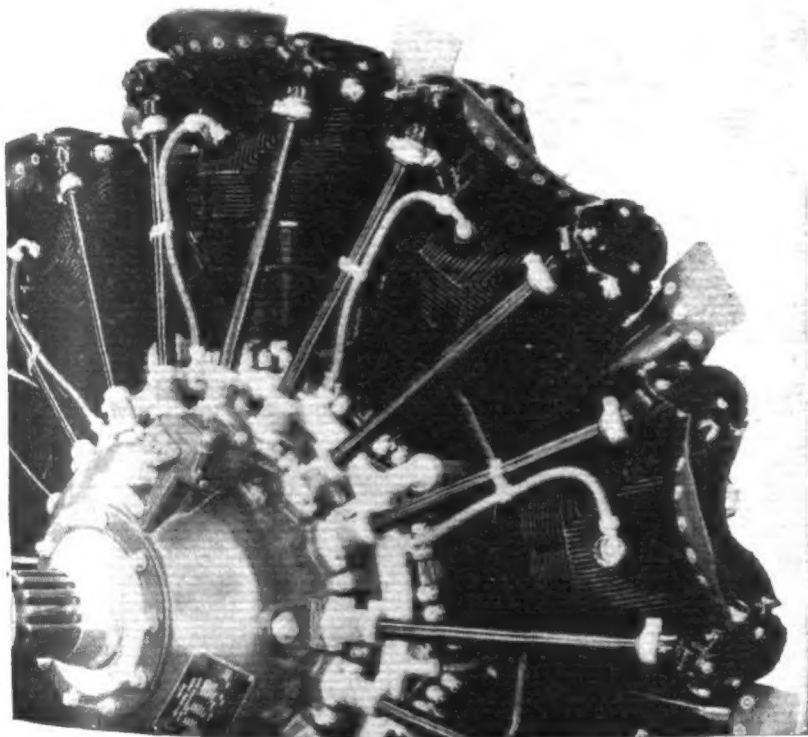
Fourteen-cylinder two-row radials are exhibited by Armstrong Siddeley, Gnome Rhône, Hispano-Suiza, and Renault. The first-named show a V.P. Tiger IX giving a maximum output of 805 h.p. and rated output of 795 h.p. at 6,250ft.; this engine will power the A. W. Whitley bomber and Imperial Airways A.W.27. Gnome Rhône have the well-known K.14 Mistral Major with 1,100 h.p. take-off power and a rating



(Top) The small diameter of the fourteen-cylinder Type 80 Hispano-Suiza is apparent.

(Centre) The Cheetah IX, complete with cowling, and the Tiger IX with V.P. equipment, make a handsome display.

(Left) No less than 2,800 sq. in. of cooling area is credited to the Wright-Cyclone G. Note also the neat total screening and valve mechanism enclosure.



of 1,000 h.p. at 11,000ft. Eight countries hold the licence to build these engines. The firm also show, for the first time, the M.14, a very compact two-row engine of 38in. diameter rated at 650 h.p. at 13,000ft. and giving 700 h.p. for take-off; the weight is only 826 lb. They have recently developed controlled cooling for their engines. Hispano-Suiza have two fourteen-cylinder radial types. There is the 14AA-06 (type 79), rated at 1,100 h.p. at 9,840ft. and 2,125 r.p.m., moderately supercharged forms being available, and also alternative gear ratios. This engine is installed in the Loire 250 single-seater fighter. Secondly, we find the 14AB-00 and -02 (type 80) (8.5 reduction or direct drive), an engine comparable with the Gnome Rhône M.14, giving 680 h.p. at 11,480ft. The weight and diameter are respectively 1,014 lb. and 39.5in. Both the Fokker and Potez twin-engine machines are powered with this unit. The fourteen-cylinder Renault of 46 litres capacity is a comparative newcomer with a rated output of 1,000 h.p. and normal ground-level output of 860 h.p.